UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,980	02/25/2004	Hitan S. Kamdar	GP-304500 (2760/163)	4514

7590	10/16/2006

General Motors Corporation
300 Renaissance Center
Legal Staff, Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER
LE, JOHN H

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/786,980	KAMDAR ET AL.
	Examiner	Art Unit	
	John H. Le	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 September 2006</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-5,7-9 and 19-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-5,7-9 and 19-26</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>25 February 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Amendment

1.   This office action is in response to applicant's amendment received on

08/03/2006.

Claims 1-2, and 8 have been amended.

Claims 6 and 10-18 have been cancelled.

Claims 20-26 have been added.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites the limitation "analysis" in line 9. There is insufficient antecedent

basis for this limitation in the claim.

Claim 20 recites the limitation "analysis" in line 9. There is insufficient

antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

4.   Claims 19 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

The claims are directed to a judicial exception; as such, pursuant to the Interim

Guidelines on Patent Eligible Subject Matter (MPEP 2106), the claims must have either

physical transformation and/or a useful, concrete and tangible result. The claims fail to

include transformation from one physical state to another. Although, the claims appear

useful and concrete, there does not appear to be tangible result claimed.

Regarding claim 19, the system to be able to realize any functionality, at least

one element must necessarily include hardware. The claim does not show any

hardware for performing. Therefore, the software itself would make it non-statutory.

Thus, the claims appear to lack a tangible result. Therefore, claim19 appear non-

statutory.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-5, 7-9, and 19-26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Marko et al. (USP 6,745151) in view of Sonnenrein et al. (US

2005/0154500 A1) and Shirane et al. (USP 5,491,631).

Regarding claims 1 and 19, Marko et al. teach a system for providing automated

vehicle diagnostic function comprising: means for providing the primary diagnostic script

to the mobile vehicle (e.g. Col.3, lines 27-40, Col.7, lines 55-61); mean for executing the

primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, lines 55-61); and mean for

storing diagnostic data based on the executed primary diagnostic script (e.g. Col.3, lines

27-40, Col.4, lines 33-53, Col.6, lines 38-48, Col.7, line 66-Col.8, line 11).

Marko et al. fail to teach means for configuring a primary diagnostic script for a

telematics equipped mobile vehicle, wherein the primary diagnostic script recreates

known problem sequences when executed.

Sonnenrein et al. teach configuring a primary diagnostic script (configuration

scripts [0031]) for a telematics equipped mobile vehicle (e.g. [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include configuring a primary diagnostic script for a telematics

equipped mobile vehicle as taught by Sonnenrein et al. in a diagnostic/prognostic

system monitors performance of a vehicle of Marko et al. for the purpose of providing

telematics terminals with a suitable access and are already present in the vehicle to be

used for performing vehicle-related telematics applications (Sonnenrein et al., [0003]).

Shirane et al. teach the primary diagnostic script (fault diagnostic program)

recreates known problem sequences when executed (fault diagnosis can be made)(e.g.

Col.10, lines50-Col.11, line 14).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include inform the diagnostic script recreates known problem

sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system

monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the

purpose of providing a fault diagnostic system for a vehicle which can provide fault

diagnosis and classification with high accuracy oil the basis of data such as engine type and engine specification required for identifying a vehicle, and which can find a true faulty portion in a short time without requiring any special knowledge or experience (Shirane et al., Col.5, lines 41-49).

Regarding claim 20, Marko et al. teach a method for providing vehicle diagnostic function within vehicle communication system comprising: the primary diagnostic script includes a plurality of diagnostic scripts (e.g. Col.8, lines 26-30) that are determined based on diagnostic options (e.g. Col.7, line 66-Col.8, line 2); providing the primary diagnostic script to the mobile vehicle (e.g. Col.3, lines 27-40, Col.7, lines 55-61); executing the primary diagnostic script (e.g. Col.3, lines 27-40, Col.7, lines 55-61); and storing diagnostic data based on the executed primary diagnostic script (e.g. Col.3, lines 27-40, Col.4, lines 33-53, Col.6, lines 38-48, Col.7, line 66-Col.8, line 11).

Marko et al. fail to teach determining a primary diagnostic script for a telematics equipped mobile vehicle.

Sonnenrein et al. teach determining a primary diagnostic script (configuration scripts [0031]) for a telematics equipped mobile vehicle (e.g. [0033], [0035]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include deteriming a primary diagnostic script for a telematics equipped mobile vehicle as taught by Sonnenrein et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. for the purpose of providing telematics terminals with a suitable access and are already present in the vehicle to be used for performing vehicle-related telematics applications (Sonnenrein et al., [0003]).

Regarding claims 2, 21, Marko et al. teach analyzing the stored diagnostic data (e.g. 55, Figs.3-4, Col.7, lines 17-31).

Regarding claims 3, 22, Marko et al. teach initiating the automated vehicle diagnostic function (e.g. Col.8, lines 2-8).

Regarding claims 4, 23, Marko et al. teach initiating the automated vehicle diagnostic function comprises: receiving a request for automated vehicle diagnostic function from a user interface (technician); and identifying diagnostic routines based on the received request (e.g. Co.3, lines 52-60).

Regarding claim 5, Marko et al. teach configuring the primary diagnostic script comprises: determining at least one diagnostic script based on diagnostic options (e.g. Col.7, line 66-Col.8, line 2); and retrieving the at least one diagnostic script (e.g. Col.6, lines 49-57), wherein the one or more diagnostic scripts are combined into the primary diagnostic script (e.g. Col.8, lines 26-30).

Regarding claims 7, 24, Marko et al. teach the primary diagnostic script triggers data capture when specific conditions exist (e.g. 55, Figs.3-4, Col.7, lines 8-46).

Regarding claims 8, 25, Marko et al. teach storing diagnostic data based on the executed primary diagnostic script comprises: receiving diagnostic data from vehicle system modules (e.g. Col.2, lines 47-49); and storing the received diagnostic data (e.g. Col.4, lines 33-53, Col.6, lines 38-48).

Regarding claims 9, 26, Marko et al. teach the diagnostic data is selected from the group consisting of: diagnostic trouble codes (e.g. Col.2, lines 42-47, Col.6, lines 38-48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include inform the diagnostic script recreates known problem sequences when executed as taught by Shirane et al. in a diagnostic/prognostic system monitors performance of a vehicle of Marko et al. in view of Sonnenrein et al. for the purpose of providing a fault diagnostic system for a vehicle which can provide fault diagnosis and classification with high accuracy oil the basis of data such as engine type and engine specification required for identifying a vehicle, and which can find a true faulty portion in a short time without requiring any special knowledge or experience (Shirane et al., Col.5, lines 41-49).

Response to Arguments

7.   Applicant's arguments filed 08/03/2006 have been fully considered but they are not persuasive.

-Applicant argues that the prior did not teach "the primary diagnostic script recreates known problem sequences when executed" as cited in claims 1, 10, and 19.

Examiner position is that Shirane et al. teach the primary diagnostic script (fault diagnostic program) recreates known problem sequences when executed (fault diagnosis can be made)(e.g. Col.10, lines 50-Col.11, line 14). Shirane et al. teach the fault diagnostic program detecting and analyzing fault when the fault diagnostic program executed, this feature is seen to be an inherent teaching of that the primary diagnostic script recreates known problem sequences when executed as intended.

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Contact Information

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to John H. Le whose telephone number is 571 272 2275.

The examiner can normally be reached on 9:00 - 5:30.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

John H. Le

Patent Examiner-Group 2863   **BRYAN BUI**
                                              PRIMARY EXAMINER

October 11, 2006